**UDOT 08A7-1** Effective: January 18, 1974 Revised: June 1, 1998

# **Purpose**

To establish the procedures for initiating and completing Geotechnical and Geological engineering and investigations for project development. To define the responsibility for requesting the involvement of the Geotechnical Division concerning Preconstruction, Construction, and Maintenance projects. To define the associated responsibilities of Preconstruction, Construction, and Maintenance concerning the Geotechnical Division

# **Policy**

The Department will utilize the Geotechnical Division to address the geotechnical and geological issues as they occur in Preconstruction, Construction, and Maintenance.

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Geotechnical Engineering UDOT 08A7-1 Effective: January 18, 1974 Revised: June 1, 1998

### **Procedures**

# **Geotechnical Procedures For Preconstruction**

**UDOT 08A7-1.1** 

Responsibility: Division Director of Roadway Support, Region Preconstruction

Engineer, Region Project Manager, Chief Structural Engineer

# **Actions**

1. Involve Geotechnical Division in the Concept, Scoping, and PS&E meetings of all projects that involve any of the 08-1 Geotech activities. (22D, 23D, 24D, 85D, 86D, 87D, 97D, 99D, 07P)

# **Responsibility:** Geotechnical Division

2. Design Phase activities will be achieved by following the guidelines set forth in the UDOT Procedure 08-1, activities 22D, 23D, 24D, 85D, 86D, 87D, 97D, 99D, 07P, and in the Geotechnical Manual of Instruction.

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# **UDOT 08A7-1** Revised: June 1, 1998

#### **Geotechnical Procedures For Construction**

**UDOT 08A7-1.2** 

**Responsibility:** Region Construction Engineer, Resident Engineer, Region Project Manager

#### **Actions**

- 1. Request Geotechnical Division's assistance in the analyzing of settlement data, piezometer data, inclinometer data, subgrade stabilization, shallow footing excavation observation (as needed), and vibration monitoring (as needed).
- 2. Ensure that the contractor provides the Geotechnical Division with the Pile and Driving Equipment Data sheet and the anticipated pile driving schedule at least 14 days in advance of when the anticipated pile driving is scheduled.

#### **Responsibility:** Geotechnical Unit

- 3. Analyze settlement data, piezometer data, and inclinometer data.
- 4. Perform vibration analysis (as needed)
- 5. Analyze subgrade stabilization.
- 6. Observe shallow footing excavation (as needed).
- 7. Perform Pile Driving Analysis.
- 8. Support Construction as needed concerning Geotechnical issues.

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# **UDOT 08A7-1** Revised: June 1, 1998

## **Geotechnical Procedures For Maintenance**

**UDOT 08A7-1.3** 

Responsibility: Region Maintenance Engineer

### **Actions**

- 1. Request assistance from the Geotechnical Division concerning landslides, slope stability, and subgrade stability issues affecting the roadway.
- 2. Provide a funding source for the Geotechnical Division to cover costs associated with site investigation and remediation design.

#### Responsibility: Geotechnical Division

- 3. Geotech Division will provide an initial site visit, a memorandum outlining a proposed study plan and projected cost of the proposed investigation and study.
- 4. Upon receiving funding develop a geotechnical evaluation report including a recommended remediation plan.

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